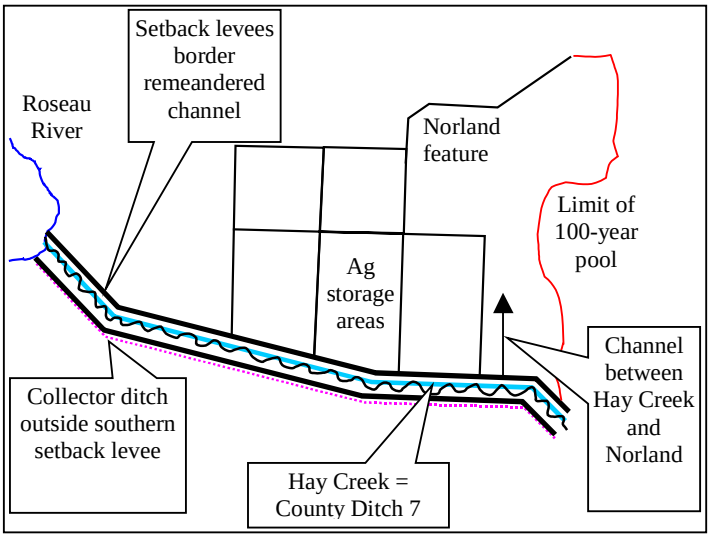
US Army Corps of Engineers
St. Paul District

Information Paper

Hay Creek Aquatic Ecosystem Restoration – Red River of the North Basin – Roseau County, Minn.



Proposed features of Hay Creek aquatic ecosystem restoration project, Roseau County, Minn.

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Location/Description:

Hay Creek is a tributary of the Roseau River, which joins the Red River of the North in Canada. The project location is five miles northeast of the City of Roseau, County Seat of Roseau County, in extreme northwestern Minnesota, about six miles south of the U.S.-Canada border.

The concept plan has three main features:

- Six and one-half miles of straight County Ditch No. 7 will be "remeandered," i.e., a sinuous streamform will be established. Because the remeandered stream will have less flow capacity than the existing county ditch, setback levees will be built to define a floodway providing equivalent flow capacity. A collector ditch along the outside toe of the south setback levee will shunt local runoff to the Roseau River.
- The Norland feature will create permanent wetlands in an area that was drained. This feature will restore a more natural hydrologic function to this area and, in doing so, delay runoff from the Norland subbasin and provide temporary off-channel retention for Hay Creek flows that exceed the creek's floodway capacity.
- If found feasible under this authority, the agricultural storage cells will restore a more natural floodplain function to several square miles by providing surrogate valley storage during major runoff events that exceed the capacity of the Hay Creek floodway and Norland feature.

Establishment of a natural streamform in Hay Creek and development of permanent and temporary wetlands in the Norland feature and agricultural storage cells will provide substantial aquatic ecosystem restoration benefits in terms of fish, waterfowl, migratory bird, and shorebird habitat.

Status:

By letter dated June 14, 1999, the Roseau River Watershed District (RRWD) requested that the Army Corps of Engineers determine the feasibility of this aquatic ecosystem restoration project.

In September 1999, the St. Paul District submitted a Preliminary Restoration Plan (PRP) to the Corps' Mississippi Valley Division (MVD) office for review and approval. The PRP provided a preliminary assessment of the practicability and cost-effectiveness of the concept plan and recommended more detailed study as a prelude to design and construction.

In January 2000, MVD approved the PRP and funding for the Environmental Restoration Report (ERR) phase, during which a feasibility report will be prepared. The ERR will evaluate alternatives and recommend a plan for design and construction.

Funding constraints during Fiscal Year 2000 slowed ERR progress. The Water Resources Development Act of 2001.provided $500,000 to complete the ERR and progress toward the design and construction phases.

The RRWD's Project Team, a team of Federal and State agencies, regional and local interests, and other stakeholders, is helping to steer the project and generate broad support.

Additional:

The 112-square-mile Hay Creek watershed has its headwaters located in the Beltrami Island State Forest and includes a mix of forest, wetlands, and farmland. The project area covers the lower portion of the Hay Creek watershed and adjacent 37-square-mile Norland subbasin. In the past, drainage in this area was dramatically altered for agricultural purposes by draining wetlands and modifying much of the creek itself. The downstream-most six and one-half miles of Hay Creek were straightened and deepened into a county ditch. Adjacent lands, however, still experience major crop losses from frequent floods. In addition, Hay Creek floodwaters contribute to flood damages along the Roseau River and may cause backwater effects that impact flood stages in the City of Roseau, located just upstream of the Roseau River-Hay Creek confluence. The proposed project will provide multipurpose benefits by restoring more natural hydrologic and hydraulic behavior and, thus, improving the area's natural resources and reducing flood damages.

Authority:

Section 206 of the WRDA of 1996, as amended.

Fiscal:

The estimated total cost of the plan recommended in the PRP is $6,583,000. The PRP was 100 percent Federally funded. The ERR is initially Federally funded; but when the Project Cooperation Agreement (PCA) is signed by the non-Federal sponsor, ERR costs as well as those for the plans and specifications and construction phases will be cost shared 65/35 Federal/non-Federal. The non-Federal cost share will be covered from a variety of sources, including the RRWD, Red River Watershed Management Board, and State. Operation and maintenance costs will be 100 percent non-Federal.